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RAW SEQUENCE LISTING

DATE: 01/07/2003

PATENT APPLICATION: US/09/829,922

TIME: 14:32:10

Input Set: N:\Crf3\RULE60\09829922.RAW.txt Output Set: N:\CRF4\01072003\1829922.raw

```
1 <110> APPLICANT: Halazonetis, Thanos
         Hartwig, Wolfgang
 3 <120> TITLE OF INVENTION: Peptides and peptidomimetics with
         structural similarity to human p53 that activate p53
 5
         function
 6 <130> FILE REFERENCE: 2973.19998
  <140> CURRENT APPLICATION NUMBER: 09/829,922
 8 <141> CURRENT FILING DATE: 2001-04-11
10 <150> PRIOR APPLICATION NUMBER: US/08/894,327
                                                             ENTERED
11 <151> PRIOR FILING DATE: 1997-12-04
13 <150> PRIOR APPLICATION NUMBER: pctus96/01535
14 <151> PRIOR FILING DATE: 1996-02-16
15 <150> PRIOR APPLICATION NUMBER: 08/392,542
16 <151> PRIOR FILING DATE: 1995-02-16
17 <160> NUMBER OF SEQ ID NOS: 35
18 <170> SOFTWARE: FastSEQ for Windows Version 3.0
20 <210> SEO ID NO: 1
21 <211> LENGTH: 1317
22 <212> TYPE: DNA
23 <213> ORGANISM: Homo sapiens
24 <400> SEQUENCE: 1
25
         gtetagagee acegteeagg gageaggtag etgetggget eeggggaeae tttgegtteg
                                                                                 60
26
         ggctgggagc gtgctttcca cgacggtgac acgcttccct ggattggcag ccaqactqcc
                                                                                120
27
         ttccgggtca ctgccatgga ggagccgcag tcagatccta gcgtcgagcc ccctctgagt
                                                                                180
28
         caggaaacat tttcagacct atggaaacta cttcctgaaa acaacgttct gtcccccttg
                                                                                240
29
         ccgtcccaag caatggatga tttgatgctg tccccggacg atattgaaca atggttcact
                                                                                300
30
         gaagacccag gtccagatga agctcccaga atgccagagg ctgctccccc cgtggcccct
                                                                                360
31
         geaccageag etectacace ggeggeeeet geaccageee eetectggee eetgteatet
                                                                                420
32
         tctgtccctt cccagaaaac ctaccagggc agctacggtt tccgtctggg cttcttgcat
                                                                                480
33
         tetgggacag ceaagtetgt gaettgeacg tacteceetg ceeteaacaa gatgttttge
                                                                                540
34
         caactggcca agacctgccc tgtgcagctg tgggttgatt ccacaccccc gcccggcacc
                                                                                600
35
         cgcgtccgcg ccatggccat ctacaagcag tcacagcaca tgacggaggt tgtgaggcgc
                                                                                660
36
         tgccccacc atgagcgctg ctcagatagc gatggtctgg cccctcctca gcatcttatc
                                                                                720
37
         cgagtggaag gaaatttgcg tgtggagtat ttggatgaca gaaacacttt tcgacatagt
                                                                                780
38
         gtggtggtgc cctatgagcc gcctgaggtt ggctctgact gtaccaccat ccactacaac
                                                                                840
39
         tacatgtgta acagttectg catgggegge atgaacegga ggeecateet caccateate
                                                                                900
40
        acactggaag actccagtgg taatctactg ggacggaaca gctttgaggt gcgtgtttgt.
                                                                                960
41
        geetgteetg ggagagaeeg gegeacagag gaagagaate teegeaagaa aggggageet
                                                                               1020
42
        caccacgage tgcccccagg gagcactaag cgagcactgc ccaacaacac cagctcctct
                                                                               1080
43
        ccccagccaa agaagaaacc actggatgga gaatatttca cccttcagat ccgtqqqcqt
                                                                               1140
44
        gagcgcttcg agatgttccg agagctgaat gaggccttgg aactcaagga tgcccaggct
                                                                               1200
45
        gggaaggagc caggggggag cagggctcac tecagecace tgaagtecaa aaagggtcag
                                                                               1260
46
        tctacctccc gccataaaaa actcatgttc aagacagaag ggcctgactc agactga
```

1317

Input Set : N:\Crf3\RULE60\09829922.RAW.txt
Output Set: N:\CRF4\01072003\1829922.raw

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48 <210> SEQ ID NO: 2
49 <211> LENGTH: 393
50 <212> TYPE: PRT
51 <213> ORGANISM: Homo sapiens
52 <400> SEQUENCE: 2
53
         Met Glu Glu Pro Gln Ser Asp Pro Ser Val Glu Pro Pro Leu Ser Gln
55
       . Glu Thr Phe Ser Asp Leu Trp Lys Leu Leu Pro Glu Asn Asn Val Leu
56
                                          25
57
         Ser Pro Leu Pro Ser Gln Ala Met Asp Asp Leu Met Leu Ser Pro Asp
58
                                      40
         Asp Ile Glu Gln Trp Phe Thr Glu Asp Pro Gly Pro Asp Glu Ala Pro
59
60
                                  55
61
         Arg Met Pro Glu Ala Ala Pro Pro Val Ala Pro Ala Pro Ala Ala Pro
62
                             70
                                                  75
63
         Thr Pro Ala Ala Pro Ala Pro Ala Pro Ser Trp Pro Leu Ser Ser Ser
64
                         85
                                              90
65
         Val Pro Ser Gln Lys Thr Tyr Gln Gly Ser Tyr Gly Phe Arg Leu Gly
66
                                          105
67
         Phe Leu His Ser Gly Thr Ala Lys Ser Val Thr Cys Thr Tyr Ser Pro
68
                                      120
69
         Ala Leu Asn Lys Met Phe Cys Gln Leu Ala Lys Thr Cys Pro Val Gln
70
                                  135
71
         Leu Trp Val Asp Ser Thr Pro Pro Pro Gly Thr Arg Val Arg Ala Met
72
                             150
                                                  155
73
         Ala Ile Tyr Lys Gln Ser Gln His Met Thr Glu Val Val Arg Arg Cys
74
                         165
                                              170
75
         Pro His His Glu Arg Cys Ser Asp Ser Asp Gly Leu Ala Pro Pro Gln
76
                                          185
77
         His Leu Ile Arg Val Glu Gly Asn Leu Arg Val Glu Tyr Leu Asp Asp
78
                 195
                                     200
                                                          205
79
         Arg Asn Thr Phe Arg His Ser Val Val Val Pro Tyr Glu Pro Pro Glu
80
                                 215
                                                      220
81
         Val Gly Ser Asp Cys Thr Thr Ile His Tyr Asn Tyr Met Cys Asn Ser
82
                             230
                                                  235
83
         Ser Cys Met Gly Gly Met Asn Arg Arg Pro Ile Leu Thr Ile Ile Thr
84
                                              250
85
         Leu Glu Asp Ser Ser Gly Asn Leu Leu Gly Arg Asn Ser Phe Glu Val
86
                     260
                                          265
87
         Arg Val Cys Ala Cys Pro Gly Arg Asp Arg Arg Thr Glu Glu Glu Asn
88
                                     280
89
         Leu Arg Lys Lys Gly Glu Pro His His Glu Leu Pro Pro Gly Ser Thr
90
                                 295
                                                      300
91
         Lys Arg Ala Leu Pro Asn Asn Thr Ser Ser Pro Gln Pro Lys Lys
92
                             310
                                                  315
93
         Lys Pro Leu Asp Gly Glu Tyr Phe Thr Leu Gln Ile Arg Gly Arg Glu
94
                         325
                                              330
95
         Arg Phe Glu Met Phe Arg Glu Leu Asn Glu Ala Leu Glu Leu Lys Asp
                                          345
```

Input Set : N:\Crf3\RULE60\09829922.RAW.txt
Output Set: N:\CRF4\01072003\I829922.raw

97 98	į	Ala		Ala 355	Gly	Lys	Glu		Gly 360	Gly	Ser	Arg	Ala	His 365	Ser	Ser	His
99	,	Leu			Lys	Lys	Gly			Thr	Ser	Arq	His		Lys	Leu	Met
100	Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu Me 370 375 380																
101		Phe	Lys	Thr	Glu	Gly	Pro	Asp	Ser	Asp							
102		385					390										
104	<210>	SEQ	ID	NO:	3												
105	05 <211> LENGTH: 390																
106	6 <212> TYPE: PRT																
107	7 <213> ORGANISM: Mus spretus																
108	<pre>&lt;400&gt; SEQUENCE: 3     Met Thr Ala Met Glu Glu Ser Gln Ser Asp Ile Ser Leu Glu Leu Pro</pre>																
109		Met	Thr	Ala	Met	Glu	Glu	Ser	Gln	Ser	Asp	Ile	Ser	Leu	Glu	Leu	Pro
110		1				5					10					15	
111		Leu	Ser	Gln		Thr	Phe	Ser	Gly		Trp	Lys	Leu	Leu		Pro	Glu
112		_			20					25					30	_	
113		Asp	Ile		Pro	Ser	Pro	His		Met	Asp	Asp	Leu		Leu	Pro	Gln
114		_		35					40	_				45	_		_
115		Asp		GLu	GLu	Phe	Phe		Gly	Pro	Ser	GLu		Leu	Arg	Val	Ser
116		<b>~</b> 1	50	<b>5</b> .	<b>7.7</b> .	70.7	<b>61</b>	55	<b>D</b>	77. 7	m)	<b>6</b> 1	60		<b>61</b>	Б.	** 1
117		-	Ата	Pro	Ата	Ата		Asp	Pro	vaı	Thr		Thr	Pro	GTA	Pro	Val
118		65	Dwo	71.	Dwa	71 -	70	Dwa	TT 2020	Dwa	т	75	Com	Dha	17.01	Dwa	80
119		Ald	PIO	Ald	PIO	85	Int	PIO	пр	PIO	90	Ser	Ser	rne	Val		Ser
120 121		Cln	Tvc	Thr	ጥ፣፣		C1,,	7 cn	Ф	C1.,		uic	Ť OU	C1.	Dho	95	Gln
122		GIII	цуз	1111	100	GIII	Gry	ASII	тут	105	riie	1113	пец	Сту	110	ьeu	GIII
123		Ser	Gly	Thr		T.vs	Ser	Val	Met		Thr	Tvr	Ser	Pro		T.e.11	Asn
124		001	O <sub>T</sub> y	115	1114	טעב	001	• • • •	120	_		- 1 -	501	125		ПСи	71011
125		Lvs	Len		Cvs	Gln	Len	Val			Cvs	Pro	Val			Tro	Val
126		-1-	130		-1-			135	-1-		-1-		140			1-	
127		Ser		Thr	Pro	Pro	Ala	Gly	Ser	Arq	Val	Arg	Ala	Met	Ala	Ile	Tyr
128		145					150	_		_		155					160
129		Lys	Lys	Ser	Gln	His	Met	Thr	Glu	Val	Val	Arg	Arg	Cys	Pro	His	His
130						165					170					175	
131		Glu	Arg	Cys	Ser	Asp	Gly	Asp	Gly	Leu	Ala	Pro	Pro	Gln	His	Leu	Ile
132					180					185					190		
133		Arg	Val	Glu	Gly	Asn	Leu	Tyr		Glu	Tyr	Leu	Glu	Asp	Arg	Gln	Thr
134				195					200					205			
135		Phe		His	Ser	Val	Val		Pro	Tyr	Glu	Pro		Glu	Ala	Gly	Ser
136			210					215	_	_		_	220	_			
137			Tyr	Thr	Thr	Ile		Tyr	Lys	Tyr	Met		Asn	Ser	Ser	Cys	Met
138		225	- 1		_	_	230	_	- 1	_		235	- 1	<b></b> .	-	~1	240
139		GLY	GTA	Met	Asn	_	Arg	Pro	тте	Leu		шe	TTE	Thr	Leu		Asp
140		C	C	C1	7	245	т	C1	70	71	250	nı.	C1	17 - 1	70	255	<b>C</b>
141		ser	ser	сту		ьeu	ьeu	стА	Arg		ser	rne	GIU	val	Arg	val	cys
142 143		7.7.~	C1	Dwa	260	7\ ~~~	7. ~ ~	71 ** ~	7. ~~~	265	C1	C1	C1	7. ~ ~	270	7~~	T
143		HIG	Cys	275	вту	мгd	нѕр	ALG	280	1111	GIU	GIU	GIU	285	Phe	Arg	ьуѕ
145		Lve	Glu		T.e.r	Cve	Pro	Glu		Pro	Pro	Glv	Ser		Lys	Ara	د ۱ ۵
146		пуз	290	Val	ьeu	Cys	110	295	Leu	110	110	оту	300	лта	шyз	n g	та
T 4 0			2,0					2,55					500				

Input Set : N:\Crf3\RULE60\09829922.RAW.txt
Output Set: N:\CRF4\01072003\I829922.raw

```
147
          Leu Pro Thr Cys Thr Ser Ala Ser Pro Pro Gln Lys Lys Pro Leu
148
                               310
149
          Asp Gly Glu Tyr Phe Thr Leu Lys Ile Arg Gly Arg Lys Arg Phe Glu
150
                           325
                                                330
151
          Met Phe Arg Glu Leu Asn Glu Ala Leu Glu Leu Lys Asp Ala His Ala
152
                                           345
153
          Thr Glu Glu Ser Gly Asp Ser Arg Ala His Ser Ser Tyr Leu Lys Thr
154
                                       360
155
          Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Thr Met Val Lys Lys
156
                                   375
157
          Val Gly Pro Asp Ser Asp
158
          385
160 <210> SEQ ID NO: 4
161 <211> LENGTH: 11
162 <212> TYPE: PRT
163 <213> ORGANISM: Homo sapiens
164 <400> SEQUENCE: 4
          Arg Ala His Ser Ser His Leu Lys Ser Lys Lys
                            5
           1
168 <210> SEQ ID NO: 5
169 <211> LENGTH: 13
170 <212> TYPE: PRT
171 <213> ORGANISM: Homo sapiens
172 <400> SEQUENCE: 5
173
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174
176 <210> SEQ ID NO: 6
177 <211> LENGTH: 11
178 <212> TYPE: PRT
179 <213> ORGANISM: Homo sapiens
180 <400> SEQUENCE: 6
          Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu
181
182
184 <210> SEQ ID NO: 7
185 <211> LENGTH: 13
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
188 <400> SEQUENCE: 7
          Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu
190
           7
192 <210> SEQ ID NO: 8
193 <211> LENGTH: 20
194 <212> TYPE: PRT
195 <213> ORGANISM: Homo sapiens
196 <400> SEQUENCE: 8
197
         Arg Ala His Ser Ser His Leu Lys Ser Lys Gly Gln Ser Thr Ser
198
                                               10
199
         Arg His Lys Lys
200
                      20
```

Input Set : N:\Crf3\RULE60\09829922.RAW.txt
Output Set: N:\CRF4\01072003\1829922.raw

```
202 <210> SEQ ID NO: 9
203 <211> LENGTH: 20
204 <212> TYPE: PRT
205 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 9
          Ser His Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys
207
208
                           5
          1
209
         Leu Met Phe Lys
210
                      20
212 <210> SEQ ID NO: 10
213 <211> LENGTH: 24
214 <212> TYPE: PRT
215 <213> ORGANISM: Homo sapiens
216 <400> SEQUENCE: 10
        Arg Ala His Ser Ser His Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser
217
218
                                               10
         Arg His Lys Lys Leu Met Phe Lys
219
                      20
220
222 <210> SEQ ID NO: 11
223 <211> LENGTH: 25
224 <212> TYPE: PRT
225 <213> ORGANISM: Homo sapiens
226 <400> SEQUENCE: 11
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228
                          5
          Ser Arg His Lys Lys Leu Met Phe Lys
229
230
                      20
232 <210> SEQ ID NO: 12
233 <211> LENGTH: 27
234 <212> TYPE: PRT
235 <213> ORGANISM: Homo sapiens
236 <400> SEQUENCE: 12
         Gly Gly Ser Arg Ala His Ser Ser His Leu Lys Ser Lys Lys Gly Gln
237
238
          1
                           5
          Ser Thr Ser Arg His Lys Lys Leu Met Phe Lys
239
240
242 <210> SEQ ID NO: 13
243 <211> LENGTH: 11
244 <212> TYPE: PRT
245 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Synthetic, modified from Homo sapiens p53
248 <400> SEQUENCE: 13
         Lys Lys Ser Lys Leu His Ser Ser His Ala Arg
249
250
252 <210> SEQ ID NO: 14
253 <211> LENGTH: 8
254 <212> TYPE: PRT
255 <213> ORGANISM: Homo sapiens
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/829,922

DATE: 01/07/2003

TIME: 14:32:11

Input Set : N:\Crf3\RULE60\09829922.RAW.txt
Output Set: N:\CRF4\01072003\1829922.raw